We claim:

1. A method of treating or preventing cancer in a human comprising administering to said human, in which such treatment or prevention is desired, a bcl-2 antisense oligonucleotide in one or more cycles of therapy at a dose of 0.01 to 50 mg/kg/day for a period consisting of 2 to 13 days.

2. The method of Claim 1, wherein the bcl-2 antisense oligonucleotide is administered for a period consisting of 3 to 9 days.

3. The method of Claim 1, wherein the bcl-2 antisense oligonucleotide is administered for a period consisting of 4 to 7 days.

4. The method as in any of Claims 1-3 comprising administering 4 to 9 mg/kg/day of a bcl-2 antisense oligonucleotide.

5. The method as in any of Claims 1-3 comprising administering 5 to 7 mg/kg/day of a bcl-2 antisense oligonucleotide.

6. The method of Claim 1 comprising further administering one or more cancer therapeutics.

7. The method of Claim 6 wherein administration of the cancer therapeutic follows administration of the bcl-2 antisense oligonucleotide.

8. The method of Claim 6 wherein administration of the cancer therapeutic precedes administration of the bcl-2 antisense oligonucleotide.

9. The method of Claim 6 wherein the cancer therapeutic is administered concurrently with the bcl-2 antisense oligonucleotide.

10. The method of Claim 6 wherein said cancer therapeutic is a chemoagent, radiotherapeutic, immunotherapeutic, cancer vaccine, anti-angiogenic agent, cytokine, gene therapeutic, or hormonal agent.

11. The method of Claim 10, wherein said cancer therapeutic is a chemoagent, and wherein said chemoagent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C).

12. The method of Claim 6 or Claim 10 wherein said cancer therapeutic is administered at a reduced dose.

13. The method as in any of Claims 1-3 or 6, wherein said administration is by oral, intravenous infusion, subcutaneous injection, intramuscular injection, topical, depo injection, implantation, time-release mode, intracavitary, intranasal, inhalation, intratumor, or intraocular administration.

14. The method as in any of Claims 1-3 or 6, wherein said cancer is a cancer of the hematopoietic system, skin, bone and soft tissue, reproductive system, genitourinary system, breast, endocrine system, brain, central nervous system, peripheral nervous system, kidney, lung, respiratory system, thorax, gastrointestinal and alimentary canal, lymph nodes, pancreas, hepatobiliary system, or cancer of unknown primary site.

15. The method as in any of Claims 1-3 or 6, wherein said cancer is non-Hodgkin's lymphoma, Hodgkin's lymphoma, leukemia, colon carcinoma, rectal carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, cervical cancer, testicular cancer, lung carcinoma, bladder carcinoma, melanoma, head and neck cancer or brain cancer.

16. The method as in any of Claims 1-3 or 6, wherein the antisense oligonucleotide is from 10 to 35 bases and is complementary to the pre-mRNA or mRNA encoding the bcl-2 gene.

17. The method of Claim 16, wherein the antisense oligonucleotide comprises at least two phosphorothioate linkages.

18. The method of Claim 17, wherein the antisense oligonucleotide comprises the sequence TCTCCCAGCGTGCGCCAT (SEQ. ID. NO.:17).

19. A method of treating or preventing cancer in a human comprising administering to said human, in which such treatment or prevention is desired, one or more chemoagents and a bcl-2 antisense oligonucleotide in one or more cycles of therapy at a dose of 0.01 to 50 mg/kg/day, wherein the chemoagent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C), and wherein the chemoagent is administered at a reduced dose.

20. The method of Claim 19, wherein said cancer therapeutic is paclitaxel and said dose is 10 to 135 mg/m^2/cycle.

21. The method of Claim 19, wherein said cancer therapeutic is docetaxel and said dose is 6 to 60 mg/m^2/cycle.

22. The method of Claim 19, wherein said cancer therapeutic is fludarabine and said dose is 2.5 to 25 mg/m^2/cycle.

23. The method of Claim 19, wherein said cancer therapeutic is irinotecan and said dose is 5 to 50 mg/m^2/cycle.

24. A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide at a dose of 0.01 to 50 mg/kg/day; and a pharmaceutically acceptable carrier.

25. A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide at a dose of 10 to 50 mg/kg/day; and a pharmaceutically acceptable carrier.

26. The pharmaceutical composition of Claim 24 or Claim 25, wherein the antisense oligonucleotide is from 10 to 35 bases and is complementary to the pre-mRNA or mRNA encoding the bcl-2 gene.

27. The pharmaceutical composition of Claim 26, wherein the antisense oligonucleotide comprises at least two phosphorothioate linkages.

28. The pharmaceutical composition of Claim 27, wherein the antisense oligonucleotide comprises the sequence TCTCCCAGCGTGCGCCAT (SEQ. ID. NO.:17).

29. A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide, at a dose of 0.01 to 50 mg/kg/day; in combination with a reduced dose of a cancer therapeutic agent, wherein said agent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C); and a pharmaceutically acceptable carrier.

30. A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide, at a dose of 10 to 50 mg/kg/day; in combination with a reduced dose of a cancer therapeutic agent, wherein said agent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C); and a pharmaceutically acceptable carrier.

31. The pharmaceutical composition of Claim 29 or Claim 30, wherein the antisense oligonucleotide is from 10 to 35 bases and is complementary to the pre-mRNA or mRNA encoding the bcl-2 gene.

32. The pharmaceutical composition of Claim 31, wherein the antisense oligonucleotide comprises at least two phosphorothioate linkages.

33. The pharmaceutical composition of Claim 32, wherein the antisense oligonucleotide comprises the sequence TCTCCCAGCGTGCGCCAT (SEQ. ID. NO.:17).